AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Canceled)

Claim 2 (Canceled)

Claim 3 (Currently amended): An axial piston drive according to Claim ~~2~~ 12,

characterized in that the thread (58, 172) is integrally formed on the drive shaft (10, 12, 170).

Claim 4 (Canceled)

Claim 5 (Canceled)

Claim 6 (Previously presented): An axial piston drive according to claim 12,

characterized in that the controller (32) comprises a counterforce mechanism with at least one prestressed torsion spring (62, 64, 66, 68) that acts on the swash plate (16, 174).

Claim 7 (Canceled)

Claim 8 (Canceled)

Claim 9 (Canceled)

Claim 10 (Currently amended): An axial piston drive according to Claim ~~8~~ 13,

characterized in that the hydraulic adjustment unit (70) is supplied with compressed oil by an oil separator (72) disposed downstream of the cylinder (36, 38, 40, 42).

Claim 11 (Currently amended): An axial piston drive according to Claim ~~10~~ 13,

characterized in that the hydraulic adjustment unit (70) is connected by way of a drain (74) to the crank chamber (24), and a influx (76) from the oil separator (72) to the adjustment unit (70) and/or the drain (74) from the adjustment unit (70) to the crank chamber (24) can be controlled.

Claim 12 (Currently amended): An axial piston drive with a continuously adjustable piston stroke comprising at least one piston movably disposed in a cylinder and connected to the swash plate;

bearing shaft fixed to a drive shaft, such that an axis of the bearing shaft is at a first tilt angle relative to a longitudinal axis of the drive shaft;

a swash plate is operatively connected to a through hole by a screw thread, wherein the through hole has an axis at a second tilt angle relative to an axis perpendicular to a surface of the swash plate;

wherein the bearing shaft rotatably supports the swash plate, via the through hole;

wherein a controller rotates the swash plate relative to the bearing shaft, from a first position where the swash plate is at a maximum tilt angle, to a second position where the swash plate is at a minimum tilt angle; and

wherein as the swash plate is rotated on the bearing shaft, from the maximum tilt angle to the minimum tilt angle, a central point of the swash plate also moves axially toward the cylinder.

Claim 13 (New): An axial piston drive with a continuously adjustable piston stroke comprising at least one piston movably disposed in a cylinder and connected to the swash plate;

bearing shaft fixed to a drive shaft, such that an axis of the bearing shaft is at a first tilt angle relative to a longitudinal axis of the drive shaft;

a swash plate is operatively connected to a through hole by a screw thread, wherein the through hole has an axis at a second tilt angle relative to an axis perpendicular to a surface of the swash plate;

wherein the bearing shaft rotatably supports the swash plate, via the through hole;

wherein a controller rotates the swash plate relative to the bearing shaft, from a first position where the swash plate is at a maximum tilt angle, to a second position where the swash plate is at a minimum tilt angle; and

wherein as the swash plate is rotated on the bearing shaft, from the maximum tilt angle to the minimum tilt angle, a central point of the swash plate also moves axially toward the cylinder so that when turned through an angle of 180°, the swash plate (16, 18, 174) is shifted axially by a distance amounting to half a maximal piston stroke (60).

Claim 14 (New): An axial piston drive with a continuously adjustable piston stroke comprising at least one piston movably disposed in a cylinder and connected to the swash plate;

bearing shaft fixed to a drive shaft, such that an axis of the bearing shaft is at a first tilt angle relative to a longitudinal axis of the drive shaft;

a swash plate is operatively connected to a through hole by a screw thread, wherein the through hole has an axis at a second tilt angle relative to an axis perpendicular to a surface of the swash plate;

wherein the bearing shaft rotatably supports the swash plate, via the through hole;

wherein a hydraulically driven adjustment unit separate from the piston supplied with compressed oil by a hydraulic unit that is independent of the medium transported by the piston (44, 46, 48, 50) rotates the swash plate relative to the bearing shaft, from a first position where the swash plate is at a maximum tilt angle, to a second position where the swash plate is at a minimum tilt angle; and

wherein as the swash plate is rotated on the bearing shaft, from the maximum tilt angle to the minimum tilt angle, a central point of the swash plate also moves axially toward the cylinder.